provisionally elects with traverse the invention of Group 1 (claims 1 and 3-12) directed to chemokine peptide 3, a variant, or a derivative thereof. In response to the Examiner's requirement to elect a single disclosed species, Applicant provisionally elects with traverse peptide 3(3-12)[MCP-1]. Reconsideration of the Restriction Requirement, in view of the remarks presented below, is respectfully requested.

Applicant's invention is broadly directed to novel agents that can modulate chemokine-induced activity, and methods to modulate chemokine-induced activity that employ the agents. The agents of the invention include chemokine peptide 2, chemokine peptide 3, and variants, analogs or derivatives thereof, as well as nucleic acid molecules that encode the peptides or the complement thereof. Chemokine peptide 2 includes amino acid sequences corresponding to sequences that are generally located in the amino-terminal two-thirds of the chemokine, and which do not include the amino-terminal about 20 to about 24 amino acid residues of the native mature chemokine. Chemokine peptide 3 includes amino acid sequences corresponding to sequences that are generally located in the carboxy-terminal half of the chemokine. Variants of chemokine peptide 2 or chemokine peptide 3 are peptides that have at least one amino acid substitution relative to the amino acid sequence of the corresponding native chemokine.

Analogs of chemokine peptides of the invention include moieties that mimic or inhibit a chemokine-induced activity, or bind to or near a chemokine receptor but do not mimic or inhibit chemokine activity (neutral), wherein the portion of the moiety that mimics or inhibits the chemokine-induced activity, or binds to or near the receptor but is neutral, is not a peptide, and wherein the active portion of the analog is not a nucleic acid molecule. For example, an analog of chemokine peptide 3 includes a compound of formula IV or a compound of formula V, which are each isosteres of a portion of chemokine peptide 3. Derivatives of the chemokine peptides of the invention include chemokine peptides or peptide variants which are subjected to chemical modifications, such as esterification, amidation, reduction, protection and the like, such as cyclic reverse sequence derivatives (CRD). Moreover, the agents of the invention include chemokine antagonists and agonists as well as agents that do not inhibit or mimic the activity of

a chemokine but bind to or near the receptor for that chemokine, i.e., neutral agents.

The Restriction Requirement is traversed on the basis that the inventions are so closely related that they cannot properly be considered independent and distinct within the statutory meaning of 35 U.S.C. § 121. In particular, claims directed to chemokine peptide 3, a variant, or a derivative thereof (claims 1 and 3-12; Group I) are clearly related to claims directed to methods in which chemokine peptide 3, a variant, or a derivative thereof is administered in an amount effective to modulate a chemokine-induced activity, or in an amount effective to treat an indication associated with chemokine activity, for example, to increase or enhance macrophage-associated activity or enhance wound healing (claims 18, 21-23, 25, 29, and 32-36; Group VII); claims directed to a nucleic acid molecule encoding chemokine peptide 3, a variant, or a derivative thereof and its complement (claims 14-15; Group III); and claims directed to methods in which a nucleic acid molecule encoding chemokine peptide 3, a variant, or a derivative thereof, or methods in which a nucleic acid molecule encoding the complement of a nucleic acid encoding chemokine peptide 3, a variant, or a derivative thereof, is administered in an amount effective to prevent or inhibit a chemokine-induced activity (claims 40 and 41; Group XI and Group XII, respectively).

The Restriction Requirement is also traversed on the basis that restriction requirements are optional in all cases (M.P.E.P. § 803). If the search and examination of an entire application can be made without serious burden, the Examiner must examine the application on the merits, even though it includes claims to distinct or independent inventions (M.P.E.P. § 803). In particular, it is respectfully submitted that the claims of Group I (claims 1 and 3-12), Group III (claims 14-15), Group VII (claims 18, 21-23, 25, 29, and 32-36), Group XI (claim 40), and Group XII (claim 41) can be effectively and efficiently searched in a single search with no additional burden placed on the Examiner. Thus, the Restriction Requirement is properly traversed, and reconsideration of the Restriction Requirement is respectfully requested.

With respect to the requirement to elect species, the requirement is traversed on the basis that the disclosed species are not "independent". Independent species have no disclosed relationship (M.P.E.P. 809). As described in the specification (pages 18-19 and 99), the amino

acid sequences of various chemokines can be aligned to identify specific regions therein (i.e., peptide 2 and peptide 3). Thus, for chemokine peptide 3, the peptide includes amino acid sequences corresponding to sequences that are generally located in the carboxy-terminal half of the chemokine. Therefore, the claimed species have a disclosed relationship and so are not independent. M.P.E.P. 808.01(a). Thus, the requirement for the election of species is properly traversed, and reconsideration is respectfully requested.

The Examiner is invited to contact Applicants' Representatives, at the below-listed telephone number, if there are any questions regarding this Response or if prosecution of this application may be assisted thereby.

Respectfully submitted,

DAVID J. GRAINGER ET AL.

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 373-6959

Date February 11, 1999 By _____
Janet E. Embretson
Reg. No. 39,665

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on February 11, 1999.

MARC IRELAND
Name

_____
Signature